This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A method for evaluating a sample, the method comprising:

generating an intensity modulated pump beam;

generating a probe beam at a wavelength within the UV range that corresponds to a local maxima of the temperature reflectance coefficient of the sample;

focusing the pump beam on the sample to periodically excite a region of the sample surface;

focusing the probe beam within the periodically excited region;

monitoring a portion of the probe beam that is reflected by the periodically excited region and generating corresponding output signals; and

evaluating the sample by analyzing the detector output signals.

2. (original) A method for evaluating a sample, the method comprising:

focusing an intensity modulated pump beam on the sample surface to periodically excite a first measurement site;

focusing an ultra-violet probe beam within the first measurement site;

measuring the modulation imparted to the probe beam by the first measurement site; and

tuning the wavelength of the probe beam to minimize the thermal wave contribution to the probe beam modulation.

3. (original) A method as recited in claim 2 that further comprises the steps of:

focusing the pump beam on the sample surface to periodically excite a second measurement site;

focusing the ultra-violet probe beam within the second measurement site;

measuring the modulation imparted to the probe beam by the second measurement site; and

comparing the modulations imparted by the first and second measurement sites.

4. (original) A method for evaluating a sample, the method comprising:

focusing an intensity modulated pump beam on the sample surface to periodically excite a first measurement site;

focusing an ultra-violet probe beam within the first measurement site;

measuring the modulation imparted to the probe beam by the first measurement site; and

tuning the wavelength of the probe beam to vary the thermal and plasma wave contributions to the probe beam modulation.

5. (original) A method as recited in claim 4, wherein the wavelength of the probe beam is varied to equalize the thermal and plasma wave contributions to the probe beam modulation.

6. (currently amended) A device for evaluating a sample, the device comprising:

a first illumination source producing an intensity modulated pump beam for periodically exciting a region on the sample;

a second illumination source producing a single probe beam to reflect off the region on the sample surface that has been periodically excited where the probe beam has a spectral range selected from a group that includes: 395 to 410 nm and 355 to 365 nm;

optics for combining the pump and probe beams so that the pump and probe beams propagate collinearly to the sample;

a detector for monitoring the modulated changes in the power of the single reflected probe beam and generating output signals in response thereto, said output signals corresponding to the modulated optical reflectivity of the sample; and

a processor for evaluating the sample using the detector output signals.

7. (currently amended) A device as recited in claim 6, wherein the spectral range of the probe beam is ~~between 400 and 405nm~~ 400 to 405nm.

8. (currently amended) A device for evaluating a sample, the device comprising:

a first illumination source producing an intensity modulated beam for periodically exciting a region on the sample;

a second illumination source producing a probe beam to be reflected by the periodically excited region, where the probe beam has a wavelength within the UV range that corresponds to a local maxima of the temperature reflectance coefficient of the sample;

a detector for monitoring the modulated changes in the reflected probe beam [[which]] and generating output signals in response thereto; and

a processor for evaluating the sample by analyzing the detector output signals.

9. (currently amended) A device for evaluating a sample, the device comprising:

a first illumination source producing an intensity modulated beam for periodically exciting a region on the sample;

a second illumination source producing a probe beam to be reflected by the periodically excited region, where the wavelength of the probe beam is tunable to minimize the thermal wave contribution to the probe beam modulation;

a detector for monitoring the modulated changes in the reflected probe beam [[which]] and generating output signals in response thereto; and

a processor for evaluating the sample by analyzing the detector output signals.

10. (currently amended) A device for evaluating a sample, the device comprising:

a first illumination source producing an intensity modulated beam for periodically exciting a region on the sample;

a second illumination source producing a probe beam to be reflected by the periodically excited region, where the wavelength of the probe beam is tunable to equalize the thermal and plasma wave contributions to the probe beam modulation;

a detector for monitoring the modulated changes in the reflected probe beam [[which]] and generating output signals in response thereto; and

a processor for evaluating the sample by analyzing the detector output signals.

11. (new) A device for evaluating a sample, the device comprising:

a first illumination source producing an intensity modulated beam for periodically exciting a region on the sample;

a second illumination source producing a probe beam to be reflected by the periodically excited region, where the wavelength of the probe beam is tunable to vary the thermal and plasma wave contributions to the probe beam modulation;

a detector for monitoring the modulated changes in the reflected probe beam and generating output signals in response thereto; and

a processor for evaluating the sample by analyzing the detector output signals.